

DOCUMENT RESUME

ED 270 953

EC 190 205

AUTHOR Clem, Annette R.
 TITLE Serving the Disabled Student: A Handbook for Faculty and Staff.
 PUB DATE [85]
 NOTE 29p.
 PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)
 -- Reference Materials - Directories/Catalogs (132)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *College Students; *Disabilities; Federal Legislation; Hearing Impairments; Learning Disabilities; Physical Disabilities; Special Health Problems; Teaching Methods; Visual Impairments

ABSTRACT

The report addresses ways to accommodate disabled students at Seattle Pacific University. Following a review of federal legislation concerning otherwise qualified handicapped individuals, the manual provides suggestions to help professors adapt instruction for the following specific groups of students: those with hearing impairments, vision impairments, impaired speech, health disorders (specifically seizures and diabetes), emotional problems, learning disabilities, and mobility impairments (general mobility disabilities and reduced hand function). Appended is a list of selected local and national agencies for the disabled. (CL)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

- ☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED270953

**SERVING THE DISABLED STUDENT:
A HANDBOOK FOR FACULTY AND STAFF**

written by

**Annette R. Clem, Ph.D.
for
The Office of Student Affairs
Seattle Pacific University**

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Annette R.
Clem

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

EC190205

Table of Contents

Topic	page
THE DISABLED STUDENT AT SEATTLE PACIFIC UNIVERSITY	1
ADAPTING INSTRUCTION FOR THE STUDENT WHO HAS IMPAIRED HEARING	2
ADAPTING INSTRUCTION FOR THE STUDENT WITH A VISION IMPAIRMENT	5
SUPPORTING THE STUDENT WHO HAS IMPAIRED SPEECH	7
A CHART OF SUGGESTED INSTRUCTIONAL ADAPTATIONS	8
SUPPORT FOR STUDENTS WHO HAVE HEALTH DISORDERS	9
- Support For The Student Who Has A Seizure Disorder	10
- Support For The Diabetic Student	11
SUPPORTING THE STUDENT WHO HAS EMOTIONAL PROBLEMS	12
ADAPTING INSTRUCTION FOR THE LEARNING DISABLED STUDENT	14
ADAPTING INSTRUCTION FOR THE STUDENT WHO HAS IMPAIRED MOBILITY	16
- The Student With General Mobility Disabilities	16
- The Student With Reduced Hand Function	18
REFERENCES	20
SELECTED AGENCIES FOR THE HANDICAPPED AND DISABLED	Appendix

THE DISABLED STUDENT AT SEATTLE PACIFIC UNIVERSITY

Equal access by qualified disabled persons to programs and services at Seattle Pacific University is guaranteed by Section 504 of the Rehabilitation Act of 1973.

Section 504, which went into effect in 1977, provides that "...no otherwise-qualified handicapped individual in the United States..., shall, on the basis of handicap, be excluded - from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity that receives or benefits from federal financial assistance (Biehl, 1978, p. 11)." Regulations of Section 504 mandate that every institution receiving federal financial assistance must provide handicapped individuals equal access to all its programs. This applies even to private institutions such as Seattle Pacific University if any federal money (grants, loans, contracts) is received by the university or by any student attending the university. This applies to recruitment and admissions as well as to instructional and evaluative processes.

Section 504 requires universities to do more than just disregard students' handicapping conditions. In fact, Section 504 mandates that students be judged by their abilities rather than by their disabilities. In addition, Section 504 requires that universities provide the means to make programs as accessible to handicapped persons as they are to be able-bodied students.

The law is quite specific about who is covered by its provisions. A handicapped person, according to Section 504, is someone who (1) has a physical or mental impairment that substantially limits one or more major life activities (functions such as performing manual tasks, walking, seeing, hearing, speaking, breathing, or learning); (2) has a record of physical or mental impairment; or (3) is regarded as having a substantially limiting physical or mental impairment... (Redden et al., 1978, p. 6).

It should be noted that universities are not required to alter standards for disabled individuals, but rather to apply those standards to all students equally. In addition, while 504 does not require a completely barrier-free environment, it does require that programs and activities be accessible to all. Because "access" is interpreted to include vocational, psychological, and educational factors well as physical variables, the total university climate is affected.

As a result of changes brought about by Section 504 and other federal and state laws, Seattle Pacific University will be serving a steadily increasing number of handicapped students. This monograph will outline measures that can be taken to ensure that the abilities of these special students are developed to their greatest potential.

ADAPTING INSTRUCTION FOR THE STUDENT WHO HAS IMPAIRED HEARING

Hearing impairment covers a range of disability from total deafness (which is unusual), to relatively mild hearing loss, which is more common than might be expected. Even a slight loss can seriously impact academic functioning.

A significant number of hearing-impaired students at Seattle Pacific University have sensori-neural hearing losses. In this type of hearing loss, sound is not just muffled or diminished but may also be distorted. Therefore whole sections of words and sentences may not be perceived at all. For example, the sentence, "Tie my shoes tight," might be heard as "ai -ai-oo-ai".

It is difficult for someone who has a severe hearing impairment to get full meaning from normally spoken speech. Speechreading does not allow the hearing-impaired person to acquire this information because even skilled speechreaders are only able to get about thirty percent of information from this method alone (Heward and Orlansky, 1984). For this reason many hearing-impaired students use sign language as their principle means of communication and may rely on skilled sign language interpreters to aid communication with the hearing.

Although hearing impairment does not affect intelligence, speech and language skills are almost always impaired in people who have severe hearing losses. This is especially true if the impairment developed before the onset of language. For this reason, and because the most commonly used signing system, American Sign Language (ASL), uses a different syntax than spoken English, a hearing-impaired person's spoken and written English is liable to contain alterations that may lead the casual observer to feel that the hearing-impaired student is unintelligent, or at least poorly prepared for the academic demands of Seattle Pacific University. For example, a student with a profound (100dB) hearing loss recently wrote the following passage as part of an in-class test:

...holophrastic is involved in prestage I. In this stage children are babbling and learning on phoneme sounds. Children have one word mean many things. This stage is not beginning of language because it doesn't use syntax. Stage one is the beginning of language because syntax, word order, and words associate to one another. Like Stage I, Stage II have word order. However, Stage II has plural, inflection preposition and article usage... (1985, used with permission).

Many of the errors seen in this passage are predictable and reflect differences between English and ASL. These differences include the deletion of most tense markers and plurals, and an acceptance of lack of agreement between noun and verb.

In addition, hearing-impaired students will have difficulty with spelling and idiomatic expressions, and in writing or comprehending complex or negative statements.

There are several alternatives available by which professors may help hearing-impaired students overcome these problems. You may help by:

- accepting in-class writing assignments as they are written, and then evaluating these assignments based on accuracy of meaning and comprehension rather than on grammar and spelling;
- allowing students to use dictionaries during in-class writing assignments;
- encouraging hearing-impaired students to complete out-of-class written assignments using outside assistance (The Office of Special Populations will provide student or tutorial assistance to help with such things as spelling and grammar if given five working days notice before the assignment is due);
- avoiding idiomatic or negative (e.g., "which of the following does not belong") statements in exams and lectures.

In addition, the following will further aid the learning potential of hearing-impaired students:

- Special tutoring will help the hearing-impaired student meet Seattle Pacific University standards for written composition. However, you should not expect the linguistic competence of the hearing-impaired student to be altered significantly by short-term intervention.
- Lectures are best comprehended if spoken at a moderate rate of speed without exaggeration, but clearly enunciated. Speak in an animated manner, since the hearing-impaired student will "read" your gestures and facial expressions as well your lips. Don't hold your hands in the handicapped student's view of your mouth when speaking. You don't need to speak louder than usual. If you speak clearly, this should be sufficient.
- To facilitate speechreading, avoid talking with our back turned to the class (as while writing on the blackboard), or while standing against a light source. One solution to this problem is the use of an overhead projector to convey visual information.
- Along with oral explanations, provide written captions to visual aids such as graphs, pictures, diagrams, etc.

- In order to ensure understanding, have hearing-impaired students restate assignments, schedule changes, and so forth back to you, perhaps after the entire class has been dismissed.
- When using visual aids (photos, blackboard, graphs, etc.) present the visual aid first and then provide an explanation. This will allow the hearing-impaired student to pay full attention to both the aid and your explanation.
- Many hearing-impaired students will use an interpreter to aid communication. An interpreter is a person skilled in sign language who has been trained to serve as the "ears" of the hearing impaired person. The interpreter will normally sit directly in front of the hearing impaired student and near you, so that the student can see you both. Other students will initially be distracted by the presence of an interpreter but, as the novelty wears off, the distraction lessens.
- Allow preferential seating. Hearing-impaired students will usually wish to sit in the front of the class.
- Write key words or technical terms on the board as they are introduced since they may be difficult to speechread. Since many technical words are difficult to sign, it is always helpful to provide the deaf student and the interpreter with a list of key words in advance of the lecture. In addition, interpreters will need copies of all written materials distributed to students.
- It is often difficult for the hearing-impaired student to watch you and the interpreter and take good notes at the same time, so the student may need the assistance of classmates to take notes. The Office of Special Populations will provide special NCR paper to notetakers and will assist hearing-impaired students in locating suitable notetakers.
- When you speak to hearing-impaired students, address them and not the interpreter. Otherwise, the student may begin to feel like an "unperson".
- During examinations where questions are presented verbally, it will be helpful for the interpreter to have and then interpret the questions for the handicapped student. In addition, you may occasionally need to restate questions in a way that will avoid language problems. Hearing-impaired students will normally need at least an additional half-hour for every hour of examination time. (The Office of Special Populations will make special arrangements and facilities for tests when given at least forty-eight hours notice)
- During films it is helpful to have the hearing-impaired student bring a flashlight so that when the room is darkened the interpreter can still be seen. Captioned films or foreign films with subtitles may be especially helpful (Redden, n.d.).

- Please note that, under current Washington State law, "Learning ear" dogs are allowed in public places, including restaurants, classrooms, and residence halls.

ADAPTING INSTRUCTION FOR THE STUDENT WITH A VISION IMPAIRMENT

An individual is considered to be blind if, with corrective lenses, his vision is 20/200 or less in the better eye, or if his field of vision is 20 degrees or less (Kirk and Gallagher, 1983, p. 183). Most blind people have some sight and many are able to read normal print with the aid of prosthetic devices.

Although most people have a deep-seated fear of vision loss, neither blindness or reduced vision need to impede university or career opportunities for a student who is so afflicted. In fact, the amount of vision remaining is a poor predictor of how well a visually impaired student will do socially or educationally. Some legally blind students are able to deal with the campus environment quite competently. We can, however, greatly enhance the visually-impaired student's success at Seattle Pacific University by cooperating in some basic environmental adaptations.

Mobility is one of the major areas in which people with impaired vision need special adaptations. Some students with serious sight impairments will use guide dogs that are especially trained to take direction from the blind person and to work well with people. However, seeing-eye dogs are not the most frequently used mobility aid. That honor is reserved for the cane. In addition, electronic devices are becoming more frequently used as aids to mobility for blind or near-blind persons.

Because of the mobility limitations of visually-disabled students, special arrangements may be needed when planning field trips. Changing class locations, or even rearranging classroom furniture, can cause problems for the visually-impaired student. In these cases it is advisable to inform the student during their implementation. (For example, when rearranging a classroom, schedule a meeting with the student when you can verbally explain the new arrangement and then walk together through the changed environment.)

If texts are to be tape recorded in advance, visually-impaired students will need to have the text materials at least four weeks before the beginning of the quarter in which they are to be used.

If books are to be put into braille format, texts will be needed a full six months ahead of the class commencing. This length of time is necessary because there are no local resources to braille college texts. In addition, it should be noted that even though previous editions of a given text may have been brailled, no re-brailling will be automatically made of newer editions. This unfortunate situation, over which Seattle Pacific has no control, may make it necessary to have a blind student with a brailled earlier edition of the text work in tandem with a sighted student or professor with a current section.

The Office of Special Populations will assist the disabled student in obtaining either taped or brailled copies of text materials and will also assist students in obtaining blank audio tapes and special tape recorders for use in classes. With the help of this office, disabled students can borrow tape recorders, or purchase tapes from Media Services. The Office of Special Populations will pay for tapes for disabled students.

In addition to these services, many visually-impaired students are eligible to borrow special play-back machines from the Washington Regional Library for the Blind and Physically Handicapped. This Library has a text transcription service for students as well as a wide variety of books on tape. (See Appendix for address)

Usually special arrangements for examinations will need to be made for students with serious vision problems. In addition to requiring extra time for completing the exams, these student may need to have questions read to them or taped in advance for them. If you will provide the exam to the Office of Special Populations one week in advance, this office will make arrangements for the exam to be pre-recorded. With forty-eight hours notice, this office can provide special test-taking facilities, someone to read the questions to the handicapped student, or someone to write the answers as dictated by the student.

There are several ways in which you, the professor, can aid the visually-handicapped student.

- Provide handouts and overhead projections that are printed in large, clear type.
- Allow preferential seating in the front of the classroom for visually-impaired students.
- Provide the visually-impaired student with copies of graphs, charts, diagrams, and drawings that are being used in class for close examination.
- Write comments on exams and papers with a broad-tipped pen in black ink.
- When possible, provide the visually-impaired student with a copy of the lecture notes.
- Help students make arrangements for examinations through the Office of Special Populations and allow sufficient time for the student to complete the test.
- Make sure that handouts and exams are printed using black lettering on white paper to maximize contrast.
- Use large, legible handwriting on blackboard and overhead projections.

- Allow the use of a tape recorder in class. (You may wish to have the disabled student sign an agreement not to release recording of lectures or to otherwise impede your ability to obtain a copyright. [Redden, 1978])
- Have a sighted student explain forms, visual material, or assignments that cannot be easily seen. A sighted student could also be asked to quietly explain the actions in films that are not made clear by the soundtrack.

Please note that, by Federal and Washington State law, seeing eye dogs are allowed in all public places. Such places include restaurants, classrooms, residence halls, etc.

When reasonable accommodations are made, the visually-impaired student may be expected to do well, even in classes with a high visual orientation and content. Given some creativity in the planning and implementation of instruction, the visually impaired student can be a fully functioning and valuable member of the Seattle Pacific University community.

SUPPORTING THE STUDENT WHO HAS IMPAIRED SPEECH

An individual's speech is considered to be impaired if it is unintelligible, abuses the speech mechanism, or is culturally or personally unsatisfactory. Another way of stating the problem is that speech is usually considered to be impaired if it: (1) draws unfavorable attention to itself; (2) interferes with communication; or (3) causes the speaker to have problems in social relationships (Nan Riper, cited in Heward and Orlansky, 1984).

Speech impairment of some sort is a fairly common problem. The term covers several kinds of disability including, but not limited to: articulation disorders (e.g., omissions, substitutions, additions, distortions of sounds), voice disorders (e.g., unusual breathiness, hoarseness, or nasality), and fluency disorders (e.g. stuttering).

Some students who are disabled by conditions such as cerebral palsy or deafness may have several of these problems at once which result in severe problems in oral communication.

One problem frequently seen in the college classroom is stuttering. Stuttering, which includes repetition, blocking, or prolongations of sounds, is sometimes accompanied by distorted movements and facial expressions. Stuttering is often situational, so that stutterers may be fluent in private conversation but not when speaking.

Social pressure for "correct" speech seems to exacerbate the problem for many stutterers, so measures that relive stress for the speaker often seem to alleviate the problem.

In working with students who stutter, or who have other difficulties in oral communication, the following suggestions may be of value.

- Relax. Tension in a listener often communicates itself to the person who has speech problems and may make the problem worse.
- Do not finish sentences for people with speech impairments. It is more helpful for you to wait for them to finish communication under their own power. Tolerance and patience can be rewarding for both the listener and the speech-impaired person.
- Sometimes students with communication problems are eager to participate in class. In fairness to all of the students in the class, it may be necessary to privately discuss with the speech-impaired student reasonable limits that will allow speaking time for all.
- On the other hand, students with impaired speech may be hesitant to express themselves orally. Insisting that the disabled student speak in class may aggravate the handicap. You might consider, alternative methods of communication such as signing, typing, or writing, since these forms of communication can be as valid as oral communication in allowing the student to respond to instruction.
- Accept and respond to all efforts at communication and try to perceive the meaning that is being conveyed in spite of the vocalizing problems that may occur in trying to express the information.

For students who cannot communicate orally and who have additional physical impairments that interfere with typing, signing, and writing, other communication aids may be used. These include such things as speech-synthesizing computers and language boards.

In most cases, the student with impaired communication abilities will rely on the professor to set an accepting and relaxed atmosphere in the classroom that will permit meaningful exchange of information. Patience and willingness to accept alternate forms of communication will make a significant difference for the disabled student. This environment will strengthen the disabled student's confidence and allow enhanced communication and participation.

SUPPORT FOR STUDENTS WHO HAVE HEALTH DISORDERS

Many disabilities can affect the way a student functions in an academic setting. These include, but again are not limited to, heart disease, multiple sclerosis, allergies, pulmonary disorders, seizures, and diabetes. Many of these disabilities are made even more significant in the classroom environment because they are not obvious to the casual observer.

Support For The Student Who Has A Seizure Disorder

Seizure disorders are a surprisingly common health problem. Since a common etiology for seizures is epilepsy, the following remarks will be focused on that condition (source: Annalee Oakes, 1985).

Most people with epilepsy function at their optimum wellness level between attacks. The old notion that epileptics tend to be mentally unbalanced and physically very delicate is now known to be an error.

There are several kinds of seizures common to epilepsy, but most people are primarily concerned about encountering a grand mal seizure. The grand mal seizure may present any or all of the following symptoms:

- 1) The student may have an "aura" in which he may have a sense of the impending seizure. The aura may be precipitated by flashing lights, intermittent or constant noise, or some other kind of bombarded stimulation. This stimulation may not even be perceived by the rest of the class, but is at a level that's irritating to the particular affected student.
- 2) The student may slump, drop to the floor and/or lose consciousness.
- 3) The student may become stiff or rigid just prior to the actual seizure.
- 4) The seizure will then take place.
- 5) After the seizure, the student will become flaccid and limp. Breathing will be very shallow and it may appear that the student is asleep. In fact a student who has just had a grand mal seizure will require a period of rest before he is ready to resume normal activity.

In the event that you encounter a person engaged in a grand-mal seizure, you should:

- Remain calm

- Remove chairs and other hard objects from the area around the students.
- Not attempt to interfere with the students movements or to force anything into victims' mouth.
- Protect the students' head with a soft cushion. (You can use a sweater jacket or other such garment)
- Allow the student to rest after the seizure.
- Cover the student with a blanket or coat to keep him at body temperature.

After you have handled the seizure, you should call Campus Security. They will ask Health Services to determine if further medical aid should be employed.

A milder type of seizure (often called petit mal) can present itself in any or all of the following ways:

1. When talking, the student suddenly has a lapse in the conversation and then picks up a different train of thought or fails to remember what was said.
2. The student "daydreams" or falls asleep in class.
3. The student has nervous mannerisms such as touching his face, or playing with his hair. In these cases, it is important that the student be interviewed by Health Services for possible placement on appropriate medication or other assistance.

If a student is a known seizure disorder patient and is taking prescribed medication, the medication may in itself cause lethargy. This or any progressive decline in the student's physical or mental performance should be reviewed with the student and campus Health Services. In such cases, it would be helpful for concerned faculty and Health Services to encourage the student to include the academic advisor in health care planning. For the faculty's maximum effectiveness in working with the seizure disorder student, it is expected that the student will obtain a physician's statement regarding limitations on academic and physical activities. Release of such a statement is, of course, a student decision, and is not compulsory.

Support For The Diabetic Student

Diabetes is not an infectious disease, and most people with diabetes lead normal lives. Diabetes is a condition that needs careful management, and as such it is important that we recognize the special needs of diabetic students. The diabetic person must be especially careful to avoid insulin reactions. Insulin reactions are caused by an imbalance of insulin, too much exercise, or too little food. The reaction may be more apt to happen when the student has

other health problems, i.e., flu, colds or infections (American Diabetes Association, n.d.) The diabetic student who complains of the following conditions should be excused from class (with a companion to assist in follow through of food ingestion) or allowed to eat in class so she can obtain the sugar her body demands. Symptoms to watch for include:

- | | |
|-----------------------------------|----------------------------|
| - excessive hunger | - blurred vision |
| - perspiration | - irritability |
| - pallor | - crying |
| - headache | - confusion |
| - dizziness | - inability to concentrate |
| - nervousness or trembling | - abdominal pain or nausea |
| - drowsiness or fatigue | - poor coordination |
| - inappropriate actions/responses | |

Treatment for any of these symptoms should include 2 teaspoons of sugar, or 1/2 to 2/3 cup of fruit juice, a regular carbonated beverage, or 1/4 to 1/3 candy bar.

You can help by:

- discussing and adapting to variations in the students' schedule that are required by medications prescribed for the student.
- allowing the disabled student to select her own seating.
- ensuring that special arrangements are made on field trips, etc. for the student to eat on a regular schedule.

The student with diabetes will need to eat on a regular schedule, so special consideration should be made for her on field trips, etc.

Although only a brief description of possible health problems is included in this monograph, students may present as with a wide variety of health problems that each require prompt and correct responses. Since this is the case, we are fortunate to have the faculty of the School of Health Sciences as a resource. Faculty members are available to give training in techniques such as CPR (cardio-pulmonary resuscitation), or first aid for choking, etc., or give clarification of other health related questions. If you wish to obtain such assistance, contact Dr. Margaret Stevenson - Dean of the School of Health Sciences.

For everyday assistance for students with health problems call: Health Services X2231 between the hours of 8 - 11:30 a.m. and 1 - 4:30 p.m. (A nurse is on call through lunch hours and after 5 p.m.) In emergencies you may also call Campus Security at X2922.

SUPPORTING THE STUDENT WHO HAS EMOTIONAL PROBLEMS

Some students arrive on campus with profound psychological problems. In others the stresses of university life may provoke anxieties or aggravate

pre-existing emotional problems. The student's ability to function in class and residential situations may as a consequence, be reduced. Excessive tension, depression, heightened anxiety about grades and tests, social withdrawal, disruptive behavior or irrational statements are just some of the symptoms which may indicate a student is experiencing emotional difficulty.

It should be noted that Section 504 specifically mentions emotional disturbance as a handicapping condition, and thus mandates response to emotional disabilities as to any other handicap (Federal Register, May 4, 1977). At Seattle Pacific University, the Student Counseling and Testing Center is ready to help students who are experiencing emotional difficulties (X2016). In emergencies the Center staff may be contacted through the Safety and Security Division (X2922).

If you suspect that a student has a disabling emotional problem the following options have been suggested by the Director of Seattle Pacific University's Counseling and Testing Center (Basham, 1985).

- You may consult with counselors at the Counseling and Testing Center about your concern. The counselors are trained to help faculty arrive at a clear course of action for helping such students.
- You should consider alerting campus offices other than just the Counseling and Testing Center so that all possible resources can be enlisted in the student's behalf. You might wish, for example, to contact the Office of the Vice President for Student Affairs, the Dean of Student Development, or the Director of Residence Life in addition to the Counseling and testing Center. The Counseling and Testing Center is ethically prohibited from calling in other campus agencies unless a student presents a real and present danger to himself or to others. However, involving other appropriate campus offices may enhance the help that can be given to the troubled student and this involvement may be requested by any faculty member.
- Be gently honest with the emotionally-troubled student about your perceptions. If the student is being disruptive and is not benefiting from the educational process, he needs to be told in fairness not only to himself but to other class members as well.
- If an emotional crisis develops, make sure the student is in no danger of violent behavior to himself or others, then reach for assistance from one of the offices noted above.

It is not recommended that faculty members involve themselves in therapeutic relationships with emotionally-disabled students (Basham, 1985). Such relationships: (1) may prevent response that is really needed; (2) may, in fact, make the problem worse because of the special relationship that exists between student and teacher; (3) tend to limit faculty resources available for other students. Active listening is, however, always helpful.

We must make reasonable accommodations for the emotionally-disabled student. However, if it becomes apparent that the student cannot function in the academic environment of the university, it is unfair to rearrange the structure of the university to accommodate him. In all such cases, the Office of Student Affairs, in consultation with the Counseling and Testing Center and off-campus professionals, should make decisions about the student's ability to function in the university setting.

Faculty and staff should be aware that they cannot be kept fully informed about matters that concern students' emotional well-being. Confidentiality regarding student psychological and emotional problems is a primary responsibility of the counseling and Testing Center. This confidentiality can be breached only when a student is assessed as being a real and present danger to himself or to others. In such cases, in keeping with ethical standards of the American Psychological Association and the American Association of Counseling Development, other resources (Office of Student Affairs, off-campus professionals, etc.) will be called upon as necessary to ensure the well-being of the student.

ADAPTING INSTRUCTION FOR THE LEARNING DISABLED STUDENT

Learning disability is a multi-faceted problem that has many other names including dyslexia, discalcula, minimal brain dysfunction, etc. Although learning disability is a relatively common problem, it is subtle enough to be called the "invisible handicap".

People with learning disabilities are usually of normal or even above-normal intelligence but have unusual difficulties in academic pursuits. Although intelligent, the learning-disabled person is an under-achiever in academic endeavors. These students frequently have problems in reading, organization, note-taking, and/or written and oral expression, as well as problems in social perception. Typically, learning-disabled students will have several of these problems.

Because of the severity and complexity of this problem, Seattle Pacific University requires documentation which certifies disability from students who wished to be considered learning-disabled by the University. More information about this process can be obtained from the Office of Special Populations.

Since learning disabilities interfere with many facets of a student's academic life, it is best to use a broad-based approach to solutions for these problems.

For instance, some problems of the learning-disabled student can best be handled by academic advice prior to course selection. Learning-disabled students frequently come to university-level work poorly prepared. They often lack necessary study skills and have deficits in using the written and spoken language, particularly in reading and spelling (Mangurm and Strichart, 1985).

When such a student reaches the university, he is often overly ambitious in course selection and sometimes does a poor job of matching his talents with an appropriate major field. A prudent and sensitive academic advisor, working together with the Office of Special Populations, can help the student to make a realistic assessment of his strengths and suggest ways to work around disability areas. For example, Music would be a poor choice of major for someone who has a problem processing auditory information. A perceptive advisor could help the student choose a major in which potential learning problems would not be critical.

There are ways to help the learning-disabled student benefit from his university experience. For instance, you might experiment with adjustments in lecture format. This student will often be helped by a multi-media format in which the class alternates among blackboard and overhead presentations, films, and guest lectures.

The student with the "invisible handicap" will especially benefit from clear, organized lectures in which previous work is recapitulated at the beginning of the lecture, key points are highlighted, and a summary of the day's information is given at the conclusion. The student with learning problems may find special assistance to comprehension from "bridges" built between text and lecture information.

Classic techniques of good teaching can be of particular value to the learning-impaired student. The syllabus should specify testing and evaluative procedures, due date, and meeting times. It may be especially helpful to this student if the syllabus is verbally reviewed at the beginning of the quarter. Learning-disabled students frequently have difficulties in the organization of time and information. Therefore, whenever possible, schedule them for classes that meet daily or three times a week to allow them to plan their time more effectively than those that must meet once a week (Brinkerhoff, 1985).

Both the Office of Special Populations and the Study Skills Lab may be useful in helping the learning-handicapped student to increase his ability to benefit from text study and to organize information effectively. The Office of Student Affairs has prepared a series of study skills booklets that may also prove useful.

Modifications in examination format may assist students with this problem. If it is possible to use the same language in teaching and testing, this alone may improve the student's performance. In addition, the using direct, clear vocabulary in the testing environment may significantly aid the learning-disabled student in comprehending the questions and responding in a meaningful manner (Harrington and Morrison, 1981).

Essay tests pose special problems for students who find written expression difficult. You might consider:

- providing extra time (generally at least an extra half-hour for each hour of test time) to complete tests because of the reading and writing problems that are inherent in all learning disabilities;

- allowing oral answers to examination questions, or allowing the student to tape record answers;
- providing a distraction-free environment for examinations as learning disability sometimes affects the ability to concentrate (special test-taking arrangements can be made through the Office of Special Populations if this would seem to be of value);
- allowing the use of a dictionary and/or calculator in the classroom during the examination period;
- using error analysis of the student's examination responses in order to give partial credit where such partial credit is appropriate;
- authorizing exam proctors to define some non-context-related words for the student.

Computer answer sheets (Scan-tron) are sometimes difficult for learning-disabled students to handle. One way to deal with this is to have the student answer sheet(s) to the Office of Special Populations for completion.

If you have questions about or need help to make exam modifications, contact the Office of Special Populations at least forty-eight hours ahead of the scheduled examinations period.

In general, steps that you take to provide a well-organized learning environment for the learning disabled will benefit your other students as well.

Here are some specific suggestions to help the student with learning problems minimize classroom difficulties.

- In class, use a "buddy system" for written assignments. Have a student who is well-organized help the learning-disabled student with highlighting of notetaking, or just as a study partner.
- Contact the Office of Special Populations which may provide proof-reading, notetaking and reading (but not editing) services for the learning disabled.
- Use visual aids that are simple and uncluttered. Whenever possible use concrete, "hands on" materials as illustrative examples.
- Outline your lecture on the blackboard as you proceed, or on a handout distributed before you begin to speak.
- Provide the learning-impaired student with lecture notes when possible.
- Give oral descriptions of all materials written on blackboard or overhead projector. Full and precise descriptors are helpful.

ADAPTING INSTRUCTION FOR THE STUDENT WHO HAS IMPAIRED MOBILITY

In our discussion of impaired mobility, this guide will focus both on students who have general movement problems and on students who have limited hard functions.

The Student With General Mobility Disabilities

There are many causes for disabilities that limit motor functioning. These include spina bifida, cerebral palsy, muscular dystrophy, polio, heart problems, and accidents of various types and levels of severity.

Although many students with motor problems will be able to move about with the aid of prosthetic devices such as canes or crutches, some students will need to use wheelchairs instead. Sometimes students who use wheelchairs are able to stand or walk but use the wheelchairs to conserve strength or for rapid movement from place to place.

Regardless of the means of locomotion involved, the campus at Seattle Pacific University poses special problems for the student with a physical disability. Our location on a hilly site and the presence of many older buildings on campus means that disabled students must overcome many obstacles as they conduct their activities on and about the campus. Physical barriers are a major problem here and may occur in many forms: Narrow doors, steep and unrailed stairs, narrow restroom stalls, bumpy sidewalks, or even a vehicle illegally parked in one of the parking spaces reserved for the handicapped.

At present, although major efforts are being made to modify campus facilities and grounds, only about fifty percent of Seattle Pacific's buildings are completely accessible (Sellin, 1985). Therefore, special measures must be taken to accommodate the needs of students who cannot reach classrooms and offices.

Although some have suggested carrying disabled students upstairs to class, this has been rejected as unacceptable. Physically carrying handicapped people promotes dependence and may be perceived by the handicapped student as demeaning.

If the classroom or office which needs to be reached by the mobility-impaired student is not accessible, the usual path taken at Seattle Pacific University has been to meet the student at another location, or to move the student's class to a more manageable site. The Office of Special Populations will assist in this process if a change of location should be necessary.

There are several ways in which you can become aware and supportive of the needs of physically handicapped students.

- Since the ten minute breaks between classes are rather short, the student with a physical disability may often be late for the next class. This is as true for the student with a motorized wheelchair as for the student on crutches since the accessible route to class is often longer and more circuitous than the paths taken by non-disabled students. Although classes must, of course, start on time, it would help the mobility-impaired student if key materials were not presented in the first few minutes of the class meeting.
- If you are scheduling a field trip, ask the disabled student to participate in the selection of destinations and transportation arrangements (Redden, n.d.). It should be noted that if Seattle Pacific University provides transportation for other students, it is required to provide transportation for the disabled as well.
- Classes taught in laboratory settings, such as chemistry and home economics, may require some modification of work stations or other furniture arrangement in the classrooms.. For instance, handicapped students in wheelchairs will need knee clearance under tables and counters, work stations will need to be within arm's reach, and aisles must be wide enough to accommodate the wheelchair. Many wheelchairs have arms that fold or drop to facilitate this process. When appropriate modifications are made, students with physical disabilities can participate in any class.
- Since Weter Library is currently inaccessible to mobility-impaired students, the Library staff will retrieve materials for disabled students upon request. In addition, some physically-impaired students may be eligible to use the Washington Regional Library for the Blind and Physically Handicapped.

Regarding "wheelchair etiquette", the following general guidelines, suggested by the University of Washington Disabled Student Services Office (1982), may prove useful as you work with physically handicapped students who rely on wheelchairs as a means of locomotion.

- You may offer assistance to a person in a wheelchairs, but if your help is declined, do not insist.
- When talking to a person in a wheelchair, it is gracious to sit or to stoop to rest your weight on one knee, especially when the conversation is going to be lengthy.
- Do not lean on the wheelchair.

- Well-intentioned people sometimes feel compelled to pat the heads of persons, confined to wheelchairs. This is very demeaning and should be avoided.

The Student With Reduced Hand Function

Some students with physical disabilities may have restricted use of their hands. This may result in reduced efficiency or an inability to carry out manual tasks such as writing, laboratory activities, or art work. Some students with physical disabilities that affect the use of hands and arms will not be able to directly participate in some laboratory activities. In these cases, the student can work with a laboratory partner. The handicapped student can verbally direct the partner's actions and thus benefit from the activity, even though he is not able to directly participate.

The Office of Special Populations will provide assistance to students with limited hand functions in activities such as filling out forms or taking tests. The Office will need at least forty-eight hours notice to arrange such assistance.

Since students with disabilities may be unable to write or may take longer to write, some modifications in normal academic procedures may be necessary. First, the Office of Special Populations will assist in locating student writers and notetakers and will provide them with NCR carbon paper for this purpose. In addition, special examination arrangements will often be necessary. For an explanation of how best to use the services of the Office of Special Populations, see Appendix A, "Examination Arrangements for Disabled Students".

Professors can help physically handicapped students achieve full participation in class activities by:

- allowing the student extra time to complete examinations and in-class assignments;
- permitting the student to take work home rather than completing it in class;
- allowing the student to tape record assignments or exams, or to take oral examinations;
- allowing the student to have a notetaker in class, or by sharing the notes of a fellow-student.

REFERENCES

- American Diabetes Association (n.d.). What school personnel should know about the student with diabetes.
- Axelrod, Lee, (1982). Social perception in learning disabled adolescents. Journal of Learning Disabilities, 15(10).
- Barbaro, Fred, (1982). The learning disabled college student: Some considerations in setting of objectives. Journal of Learning Disabilities, 15(10).
- Basham, A. (personal communication, August 6, 1985).
- Biehl, G. Richard, (1978). Guide to the section 504 self-evaluation for colleges and universities. Washington: National Association of College and University Business Officers.
- Bontrager, L. (personal communication, May, 1985).
- Brinkerhoff, L. (1985, March). Meeting the needs of the learning disabled university student. Paper presented at the meeting of the Council for Exceptional Children, Anaheim, California.
- Dailey, A. L., (1982). College students with epilepsy: Their student personal needs. Journal of the National Association for Women Deans, Administrators and Counselors, 45(4), 31-37.
- Department of Health, Education and Welfare, (1977). Nondiscrimination on basis of handicap. The Federal Register, 42(86).
- Dexter, Beverly, (1982). Helping learning disabled students prepare for college. Journal of Learning Disabilities, 15(6).
- Disabled Student Services, (1982). Faculty guide for working with disabled students. Seattle: University of Washington.
- Federal Programs Advisory Service, (1985). Department of education agency chapter 300: Requirements for institutions of postsecondary education.
- Ganshaw, L. & Washington, M., (1983). The learning disabled student in college: Implications for programming. Journal of Developmental and Remedial Education, 7(1), 13-17.
- Hallahan, D. & Kaufman, J., (1982). Exceptional children (2nd ed.). Englewood Cliffs: Prentice-Hall.
- Harrington, A. M. & Morrison, R. A., (1981). Modifying classroom exams for secondary LD students. Academic Therapy, 16(5).

- Heward, W. L. & Orlansky, M. D., (1984). Exceptional children (2nd ed.). Columbia, OH: Merrill.
- Kirk, S. A. & Gallagher, J. J., (1983). Educating exceptional children. Boston: Houghton Mifflin.
- Mangrum, C. T. & Strichart, S. S., (1985, June). How can learning disabled high school students prepare for college? News Digest Information Center for Handicapped Children and Youth.
- Oakes, A. (personal communication, 1985).
- Redden, M. R., (1978). The college student with a disability: A faculty handbook. The President's Committee on Employment of the Handicapped.
- Redden, M. R., Levering, C., Di Quinzio, D., and the Task Force on Model Policy, (1978). Recruitment, admissions and the handicapped students: A guide for compliance with section 504 of the rehabilitation act of 1973. Washington: The American Association of Collegiate Registers and Admissions Officers and the American Council on Education.
- Rosen-Ritt, L. (personal communication, July 11, 1985).
- Sellin, C. (personal communication, May 30 and June 12, 1985).
- Vogel, Susan, (1982). On developing LD college programs. Journal of Learning Disabilities, 15(9).
- Washington State Human Rights Commission, (1979). A new look: The law and the disabled.
- , (1979). The deaf student in college. Gallaudet College.
- , (n.d.) Postsecondary section: Section 504 training and reference manual. National Association of Counties Research.

Appendix A

SELECTED AGENCIES FOR THE HANDICAPPED AND DISABLED

SEATTLE PACIFIC UNIVERSITY CAMPUS

Office of Special Populations

--Director, Steve Swayne (X2018)

--Assistant Director, Brian Bosse (X2966)

LOCAL AGENCIES:

Advisory Committee on State Programs for the Deaf

811 137th Avenue Northeast #201

Bellevue, Washington 98005 (206) 454-7858

Commission for the Blind

3411 South Alaska Street

Seattle, Washington 98188 (206) 721-4422

Community Service Center for the Deaf and Hard of Hearing

914 East Jefferson, Campion Towers
Room 328

Seattle, Washington 98122 (206) 322-4990

Community Services for the Blind

1530 Queen Anne Avenue North

Seattle, Washington 98109 (206) 285-0900

Community Services for the Handicapped

Carol Jacobsen, Director

4807 196th Southwest

Lynnwood, Washington 98036 (206) 775-7457

Division of Vocational Rehabilitation District III

Charles A. Holmquist, Administrator

1700 East Cherry

Seattle, Washington 98122 (206) 464-7790

Epilepsy Association of King County

1715 East Cherry

Seattle, Washington 98122 (206) 323-8174

Foundation for the Handicapped

1600 W. Armory Way

Seattle, Washington 98119 (206) 283-4520

King County Multiple Sclerosis Association
6869 Woodlawn Avenue Northeast
Seattle, Washington 98115 (206) 522-2850

Muscular Dystrophy Association of America
215 6th North
Seattle, Washington 98109 (206) 624-5220

Northwest Foundation for the Blind
5250 Rainier Avenue South
Seattle, Washington 98118 (206) 722-7171

Seattle Hearing and Speech Center
1620 18th Avenue
Seattle, Washington 98122 (206) 323-5770

Speech and Hearing Center
14245 Ambaum Blvd. Southwest
Seattle, Washington 98166 (206) 246-8677

University of Washington Speech
and Hearing Clinic
4131 15th Northeast
Seattle, Washington 98195 (206) 543-5440

Washington Association for Children
and Adults with Learning Disabilities
Bldg. #1, Suite 217, Benaroya Business Park
300 120th Avenue Northeast
Bellevue, Washington 98005 (206) 451-9171

Washington Regional Library for the Blind
and Physically Handicapped
811 East Harrison Street
Seattle, Washington

NATIONAL AGENCIES:

Alexander Graham Bell Association
for the Deaf
3417 Volta Place, N. W.
Washington, D. C. 20007

Allergy Foundation of America
801 Second Avenue
New York, N. Y. 10017

American Academy for Cerebral Palsy
and Developmental Medicine
1255 New Hampshire Avenue, N. W.
Washington, D. C. 20036

American Council for the Blind
1211 Connecticut Avenue, N. W.
Washington, D. C. 20006

American Foundation for the Blind
15 West 16th Street
New York, New York 10011

American Printing House for the Blind
Box 6085
1839 Frankfort Avenue
Louisville, KY 40206

American Psychiatric Association
1700 Eighteenth Street, N.W.
Washington, D. C. 20009

American Psychological Association
1200 17th Street N. W.
Washington, D. C. 20036

American Speech, Language,
and Hearing Association
10801 Rockville Pike
Rockville, MD 20852

Architectural Barriers Committee
National Association of the
Physically Handicapped
6473 Grandville Avenue
Detroit, Michigan 48228

Arthritis Foundation
1212 Avenue of the Americas
New York, New York 10036

Association for Children and Adults
with Learning Disabilities
5225 Grace Street
Pittsburgh, PA 15236

Association for Education of the
Visually Handicapped
919 Walnut Street
San Francisco, CA 94121

The Association of Rehabilitation
Facilities
5530 Wisconsin Avenue, Suite 955
Washington, D. C. 20015

Center for Innovation in Teaching
the Handicapped
Indiana University
2805 East Tenth Street
Bloomington, Ind. 47401

Closer Look--National Information
Center for Handicapped
Box 1492
Washington, D. C. 20013

Conference of American Instructors
of the Deaf
5034 Wisconsin Avenue, N.W.
Washington, D. C. 20016

Conference of Executives of American
Schools of the Deaf
5034 Wisconsin Avenue, N.W.,
Washington, D. C. 20016

Convention of American Instructors
of the Deaf, Inc.
5034 Wisconsin Avenue, N.W. Suite 11
Washington, D.C. 20016

Epilepsy Foundation of America
1828 "L" Street, N.W.
Washington, D.C. 20036

Goodwill Industries of America, Inc.
9200 Wisconsin Avenue
Washington, D. C. 20014

Library of Congress Division for
The Blind and Physically Handicapped
1291 Taylor Street, N. W.
Washington, D. C. 20542

Little People of America
Box 126
Owatonna, Minn. 55060

Mental Health Materials Center--
Human Relations Aide
419 Park Avenue South
New York, New York 10016

National Association for the
Visually Handicapped
3201 Balboa Street
San Francisco, CA 94121

National Center for the Prevention
and Treatment of Child Abuse and Neglect
1205 Oneida Street
Denver, CO 80220

National Clearinghouse for the
Gifted and Talented
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22901

National Council for the Gifted
700 Prospect Avenue
West Orange, New Jersey 07052

National Epilepsy League, Inc.
6 North Michigan Avenue
Chicago, IL 60602

National Federation for the Blind
Suite 212, Dupont Circle Bldg.
1346 Connecticut Avenue, N.W.
Washington, D. C. 20036

National Library Service for the Blind
and Physically Handicapped
1291 Taylor Street, N.W.
Washington, D. C. 20542

National Paraplegia Foundation
333 North Michigan Avenue
Chicago, IL 60601

National Quadriplegia Foundation
333 North Michigan Avenue
Chicago, IL 60601

National Rehabilitation Association
1522 "K" Street, N. W. Suite 1120
Washington, D. C. 20005

National Society for Low Vision
People, Inc.
2346 Clermont
Denver, CO 80207

National Society for the Prevention
of Blindness, Inc.
79 Madison Avenue
New York, New York 10016

National Technical Institute for the Deaf
One Lomb Memorial Drive
Rochester, New York 14623

Orton Society
8415 Bellona Lane, Suite 113
Towson, MD 21204

United Cerebral Palsy Association
66 East Thirty-fourth Street
New York, N.Y. 10016